Fungal abscess of the parotid gland: The value of microbiological assessment

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Introduction

- Fungal parotitis is rare and the sequela parotid abscess exceedingly so.
- We report our experience with Candida glabrata and Candida albicans parotid gland abscesses in critically ill HIV positive patients and highlight the value of microbiological assessment it tailoring their management.

Clinical Presentation

Case 1

- 58-year-old male with a 6-month history of pain in the right temporomandibular joint.
- HIV positive (CD4 count of 323 cell/Ul, Viral Load (VL) was lower than detectable (LDL)).
- Clinically he had small cystic preauricular lesion (<2cm) on the right with extensive oral candidiasis.
- He was treated with serial aspirations of the abscess.
- A moderate growth of *C.glabrata* was yielded which was sensitive to Amphotericin B.
- He was treated with oral fluconazole 200 milligrams (mg) daily to treat his oral candidiasis for one month.
- There was complete resolution of the abscess prior to discharge.

Case 2

- A 46-year-old female with multiple comorbidities and HIV on antiretroviral therapy (CD4 count of 84 cell/Ul, VL of 303 copies/ml) presented to the emergency unit acutely unwell, in a hyperosmolar hyperglycaemic state, precipitated by sepsis.
- She had a week's history of a painful swelling at the left angle of the mandible.
- Clinical features in keeping with acute parotitis with an associated abscess, oral candidiasis and odontogenic sepsis.
- A bacterial suppurative parotid abscess was suspected, therefore amoxicillin/clavulanic acid therapy was initiated.
- Contrasted CT scan revealed a large multi-loculated, rim-enhancing, intraparenchymal collection of the parotid, with associated sub-centimetre, reactive cervical lymphadenopathy, and no evidence of sialolithiasis (Figure 1)
- She had an urgent incision and drainage (I&D) under general anaesthesia.
- Tissue specimens and pus were sent for MC&S and both cultured *Candida albicans* sensitive to fluconazole.
- Fluconazole 400 milligrams daily per os was initiated and was continued for 1 month. She responded well to antifungal therapy and was discharged.

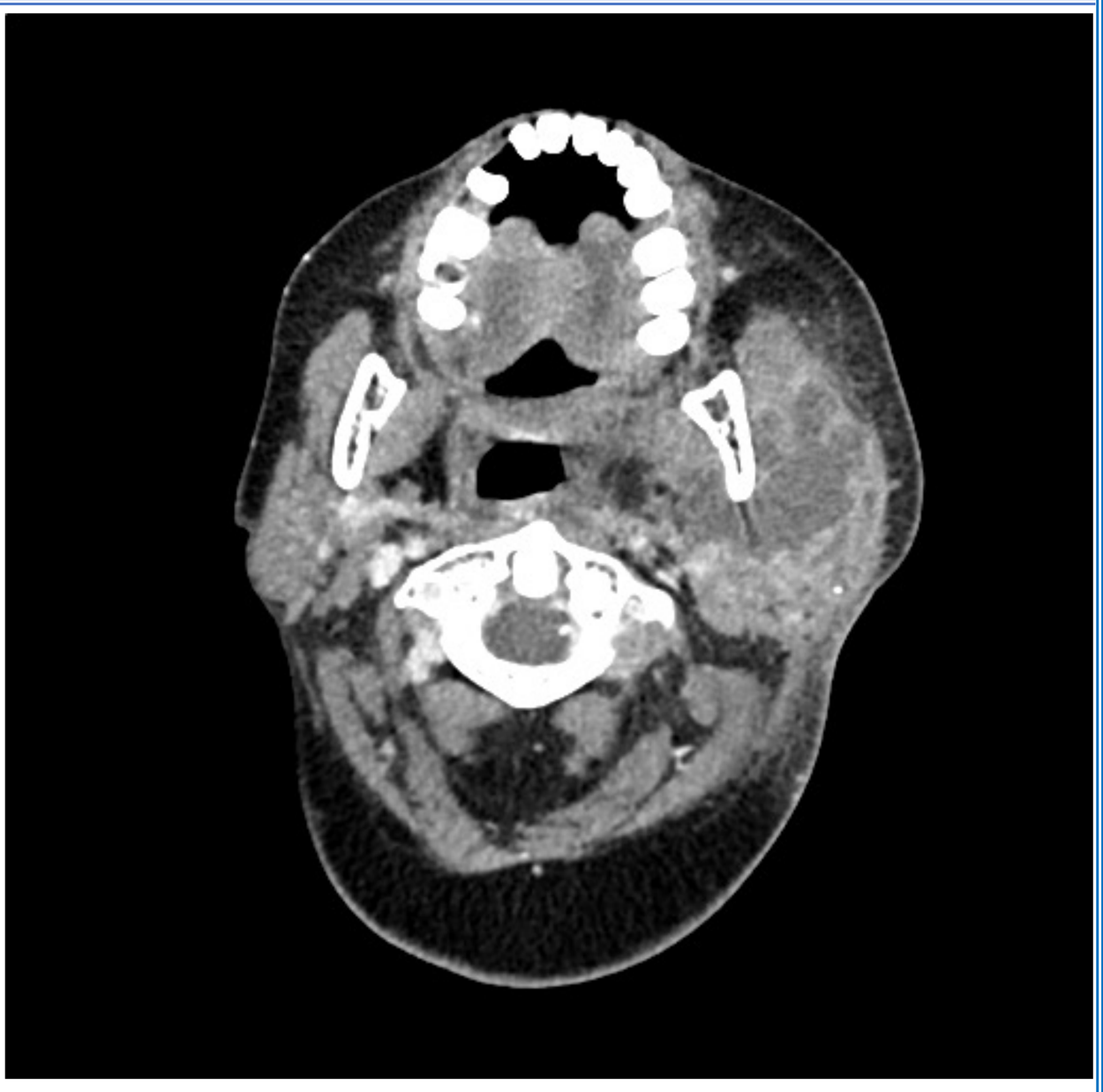

Figure 1

Conclusion

- The surgical approach to a fungal parotid abscess should be graduated, where, in the absence of complications, less invasive, serial needle aspirations with or without ultrasound guidance may suffice and will provide the necessary specimens for culture and sensitivity to direct antifungal therapy[1].
- I&D may be required for source control in the presence of overwhelming sepsis, failed conservative treatment or with large collections with or without extension into the deep neck spaces[1].
- Our approach was to manage parotid abscesses in two different ways as determined by the general clinical condition of the patient, with both having acceptable and clinically successful outcomes.
- Mycotic infection should be considered as part of the differential in any patient presenting with a parotid abscess, especially in the context of immunosuppression and should be considered in the differential diagnosis.

References:

1.Scattergood, S., Moore, S., Prior, A., Yusuf, G. and Sidhu, P., 2018. Percutaneous drainage of a parotid gland abscess under contrast-enhanced ultrasound guidance: A case report. Ultrasound, 26(3), pp.182-186.

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